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THESIS

COMMAND CONTROL AND COMMUNICATIONS SYSTEM
EVALUATION OF DOD

by

Linda K. Crumback

June 1983

Thesis Advisor:

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Command Control and Communications System
Evaluation of DOD

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I. INTRODUCTION

"Command and Control (C2) is in many ways all things to all people." [Ref. 1] To some command and control means the exercise of authority by a commander over his subordinates. To others it may be a display, a communications system, or an organizational procedure. For Dr. Gerald Dinneen, former Assistant Secretary of Defense (Communications, Command, Control, and Intelligence), command and control means a system by which our military commanders, under the direction of the President as the Commander-in-Chief, employ the military strength of our nation. [Ref. 2] The military definition as put forth in the Department of Defense Dictionary of Military and Associated Terms is

"the exercise of authority and direction by a properly designated commander over assigned forces in the accomplishment of the mission. Command and control functions are performed through an arrangement of personnel, equipment, communications, facilities, and procedures which are employed by a commander in planning, directing, coordinating and controlling forces and operations in the accomplishment of the mission." [Ref. 3]

From this definition the term - command, control and communications (C3) - has evolved. The acronyms, C2 and C3, have become synonymous. The inclusion of communications has emphasized the importance of the distribution of information up and down the chain of the command via whatever arrangement of the commander's resources. A C3 system divides into the following parts: "a recognized point of authority, a resource

which can be controlled by the authority; a means to control the resource by the authority; and a means to perceive the environment directly or indirectly provided to the authority in which the resource is to be controlled." The interaction of these four parts in satisfaction of an objective or objectives is a C3 system. [Ref. 4]

The Department of Defense (DOD) may be categorized as a C3 system. The point of authority is the Secretary of Defense. The resource is the National Military Establishment consisting of the civilian and military personnel at all levels of the Department and their weapons and facilities. A means to control the resource is the World-Wide Military Command and Control System which provides the medium for operational direction and technical administrative support involved in the function of command and control. The means to perceive the environment is via the surveillance and intelligence systems.

The categorization of DOD as a C3 system illustrates the concerns of LT General Hillman Dickinson, the former Director, C3 Systems, Organizations of the Joint Chiefs of Staff, who stated that the C3 community must

"look at the entire C3 system and its interfaces with intelligence, and at all the ancillary parts from logistics support through personnel. Look at this as one system and make it play as one system. Make sure we have not created a combination of individual projects which have left weak points in some area. It must be an entire system operation without weak points if it's going to survive." [Ref. 5]

The purpose of this paper is to evaluate the Department of Defense as a C3 system. It is a C3 system with other such systems nested within it. The systems are the Joint Chiefs of Staff, the combatant commands, the military departments, and the Office of the Secretary of Defense. Each must function efficiently and effectively for the whole system to work. The interaction of these systems is a vital aspect of the whole system. As General Dickinson said, the "entire system operation" should be evaluated to weed out the weak points and combine the nested systems in the most effective way. It is important that they do not overlap and duplicate the same jobs which might confuse subordinate units. The lines of command and communication should be clear and distinct.

As our nation's former senior military leader has indicated, there is at least one weak point in the defense system - the current structure of the Joint Chiefs of Staff (JCS). General David Jones, the former Chairman of the JCS, has wondered if the current structure "best serves the nation or merely the parochial interests of each Service." [Ref. 6] In the summer of 1980, while testifying before Congress during confirmation hearings involving his second term as Chairman, he advocated that the role of the nation's senior military leader be strengthened, General Jones said that

"In the two and a half years on this job, I had more influence individually than institutionally. The reason, not widely understood, is that the United States, in setting up the organization of the JCS more than 3 decades ago, decided on a "compromise

system". The choice then was between separate services and a highly integrated organization, not necessarily patterned after the German General Staff, but a straight-line system. A compromise evolved whereby we run the joint operation by committee action. And clearly we are a committee of five with an essentially equal voice on the issues. In so doing we have gained some strengths, but also encouraged the intrinsic weaknesses of the committee system." [Ref. 7]

In the last eighteen years, weak points in the DOD system have been noted in reports by committees tasked to study its performance. The committees have recommended varying degrees of reorganization, but none of the major ones have been implemented. In this thesis, these studies are reviewed and their applicability to the present organization is determined. Recommendations are made to correct any deficiencies. Both the evolution of the Department of Defense and its current organization are described to provide a background for the reorganizational studies.

Recognition of weak points and development of appropriate changes will better equip the DOD to aid the President and the Secretary of Defense in meeting their objectives of national security and world peace. If the lines of command and communication are clear and distinct and the interrelationships of the systems are more closely defined, future C3 systems may be designed and fielded with less difficulty.

II. EVOLUTION OF THE PRESENT ORGANIZATION

Three decades have passed since President Harry S. Truman signed the National Security Act of 1947. This act created a single National Defense Establishment and placed within it three separate departments and four armed services. The act was basically a compromise between diverse interests. The passage of the act involved reconciling the position of those who wanted one strongly unified military department and those who insisted on keeping the military services separate.

[Ref. 8]

It is difficult to cite an exact date for the beginning of the drive for unification of the armed services. Some date the origins to the Spanish-American War when great dissatisfaction arose because of the failure of the Army and the Navy to cooperate fully during the Cuban campaign. In 1903 the Joint Army-Navy Board was created to secure the cooperation and coordination in all policies involving joint action by the Army and Navy. Others trace the origins of unification to the post-World War I movements for comprehensive administrative reform and economy in government. Several bills were introduced to create a single Department of National Defense. Others bellow the idea of unification did not really originate until World War II. [Ref. 9]

In the early days of World War II, this nation established unity of command in the operational theatres and set up a U.S.

Joint Chiefs of Staff as the counterpart to the British Chiefs on the Combined Chiefs of Staff. The success of the joint operations during World War II led to the support for some form of unification in the postwar period.

Proponents of the concept of unification based their arguments on two premises. First, coordination between the services in modern warfare was necessary and this could be achieved best through unification. Second, unification would bring more economy and efficiency into the military establishment and simplify the problem of control. Prior to World War II, our military consumed very few resources so that not many people were concerned about efficiency and control. Until 1939 the budgets for the Army and Navy totalled less than one billion dollars and changes to the structure were met with little enthusiasm from Congress. Only one unification bill reached the floor of either house before 1941. During the war, President Roosevelt was the focal point of the huge military machine, devoting most of his time to the war. This was expected in a war condition but not during peacetime. The President needed a single cabinet level officer to do it for him. [Ref. 10]

The Department of Defense (DOD) was created by the 1947 act. It contained the following basic elements: (1) creation of a separate Air Force as an equal service with the Army and Navy; (2) establishment of three equal military departments, each with a civilian secretary; (3) creation of the National

Military Establishment under a civilian Secretary of Defense with "general authority, direction, and control" over the three military departments; (4) provision of legislative authority and a charter for the Joint Chiefs of Staff; (5) creation of a Munitions Board and a Research and Development Board to coordinate interservice activities in these fields; (6) creation of the interagency policy coordinating organs on which the DOD was to be one of the represented agencies: the National Security Council and the National Security Resources Board; and (7) the creation of the Central Intelligence Agency. [Ref. 11]

The 1949 amendments to the National Security Act strengthened the authority of the Secretary of Defense by removing the word "general" from "direction, authority, and control". They eliminated the concept of powers reserved to the services, thus changing the National Military Establishment to the executive Department of Defense and changing the service departments from executive to military departments. The Secretary of Defense became the sole defense representative on the National Security Council and the clause allowing direct appeal by the military departments to the President was removed. [Ref. 12] However, the right of the Service Secretary and a member of the JCS to present recommendations on their individual initiative directly to Congress was reaffirmed. A Chairmanship was created for the JCS.

President Eisenhower, shortly after his election, appointed the Rockefeller Committee to examine the Defense organization.

In 1953 the recommendations of the Committee were enacted. The recommendations were: (1) the insertion of the Service Secretaries into the chain of command for the unified and specified commands for the purpose of improving civilian control; (2) the addition of six Assistant Secretaries of Defense; (3) the replacement of the Munitions Board and the Research and Development Board with the Office of Defense Mobilization; (4) the strengthening of the planning role of the JCS; (5) the administrative authority over the Joint Staff to the Chairman of the JCS; and (6) the doubling of the number of assistant secretaries in the departments.

[Ref. 13]

By 1957, the public furor over the first Sputnik, the open interservice rivalry over missile development, the need for improve control of nuclear weapons and missiles, and the desire to eliminate duplication in the research and development all influenced President Eisenhower to propose a DOD reorganization.

President Eisenhower felt that greater centralization would solve the problems in defense. He believed that all forces must be led as one, and wanted the powers of the Secretary strengthened. Congress gave in 1958 the Secretary of Defense approval to reassign common supply and service functions, to assign the development and operational use of new weapons to any Department or Service, and to engage in basic and applied research projects. The Service Secretaries were taken out of

the chain of command to the unified and specified commands. The size of Joint Staff was increased. The authority of the Secretary over research and development programs was strengthened. The number of Assistant Secretaries and Assistant Service Secretaries was reduced. The joint operational responsibilities of the Services was shifted to the unified commands and their joint planning responsibilities to the JCS. [Ref. 14]

The 1958 Reorganization was the last major statutory change to DOD. In the 1960's Secretary Robert McNamara made especially vigorous use of the powers granted his office. He continued the practice started by his predecessor of assigning combat units of the three military departments to unified and specified commands. By the end of 1961 with the creation of the STRIKE Command, virtually all combat forces had been assigned to unified and specified commanders who report directly to the Secretary through the JCS. He also continued to consolidate common service and supply functions under defense-wide agencies as his predecessor had begun. [Ref. 15]

In the past twenty years the changes have been basically in the Office of the Secretary of Defense. The number of Deputy and Assistant Secretaries of Defense (ASD) has varied depending on the requirements of the President and Secretary of Defense in office. Each administration has its own way of managing the Department and deciding which programs and issues would receive their primary attention. An issue which

has received much attention by the present and the previous four administrations is command, control, and communications. The interest in the issue started with the Cuban Missile Crisis in 1962 and resulted in changes to DOD.

The Crisis and the prospect of the southeastern United States becoming part of a theatre of operations accomplished two things: it forced the establishment of the National Communications System (NCS), which coordinated all federal communications resources, and promoted the Washington-Moscow hot line. The system grew into the World-Wide Military Command and Control System (WWMCCS). With proliferating requirements and expanding technology WWMCCS moved ahead rapidly on a broad front with very little top-level direction. It was believed by the WWMCCS advocates that the system would perform its communications functions adequately. However, in the late 1960s the USS Liberty, USS Pueblo, and EC-121 affairs revealed that the United States command, control, and communications system was not responsive and fine-tuned as it needed to be. In each of the incidents highly critical messages were delayed resulting in loss of military men and equipment. [Ref. 16]

The correction of this problem was high priority for the Nixon administration. In May 1970 Secretary of Defense Melvin Laird created the post of the Assistant to the Secretary of Defense (Telecommunications) to be the DOD counterpart to President Nixon's Office of Telecommunications Policy. The

Secretary's appointment required no legislation and anticipated the findings of the Blue Ribbon Defense Panel commissioned by President Nixon to report on DOD. The Panel recommended that an office of the Assistant Secretary of Defense (Telecommunications) be established to manage the defense C3 community. The post was created in December 1971. [Ref. 17]

Secretary of Defense Schlesinger abolished the ASD (Telecommunications) in January 1974 in favor of the Director, Telecommunications and Command and Control. Secretary of Defense Brown in March 1977 abolished the posts of Director and ASD (Intelligence/Director of Defense Intelligence) and established the office of ASD (Communications, Command, Control, and Intelligence (C3I)). With the consolidation of C3I programs and the associated funding, four major reporting structures were brought together. These were the Telecommunications Command and Control Program, the National Intelligence Program, Surveillance and Warning, and those programs identified with Combat Support, such as electronic warfare, positioning and navigation systems, counter C3 and the like. [Ref. 18]

In 1979 the C3 System Directorate was established in the Joint Staff of the JCS. Its mission is to develop policies, plans and programs for the JCS to insure adequate C3 support to the commanders and the National Command Authority (NCA) for joint and combined operations; conceptualize future C3 systems design; and provide direction to improve command and control. [Ref. 19]

In 1981 the Reagan administration came into office and changed the names of the C3 offices in DOD again. The ASD (C3I) is now the Deputy Under Secretary of Defense for C3I in the office of the Under Secretary of Defense for Research and Engineering. The C3 administration changes are reflective of those made within the DOD in the past twenty years.

III. PRESENT ORGANIZATION OF THE DEPARTMENT OF DEFENSE

The Department of Defense is the largest single agency in the Government of the United States. It spent approximately 25 percent of the national budget in recent fiscal years. In the three decades since its creation, the Office of Secretary of Defense has mushroomed from a handful of policy makers to one of the major bureaucracies of the Government, staffed by thousands of officers, enlisted personnel, and civilian employees.

The Defense Department includes the Office of the Secretary of Defense, the Joint Chiefs of Staff and their supporting establishment, the Departments of the Air Force, Army, and Navy, the four military Services, the unified and specified commands, and such other agencies as the Secretary of Defense establishes to meet specific requirements. The central function of the DOD is to provide for the military security of the United States and to support and advance the national policies and interests of the United States. [Ref. 20]

A. SECRETARY OF DEFENSE

The Secretary of Defense, principal assistant to the President in all matters relating to the Department of Defense, is appointed by the President with the advice and consent of the Senate. The Secretary exercises direction,

authority, and control over the Department. (See Figure 1). He is a member of the National Security Council, the National Aeronautics and Space Council, and the North Atlantic Council.

The Deputy Secretary of Defense is responsible for the supervision and coordination of the activities of the Department.

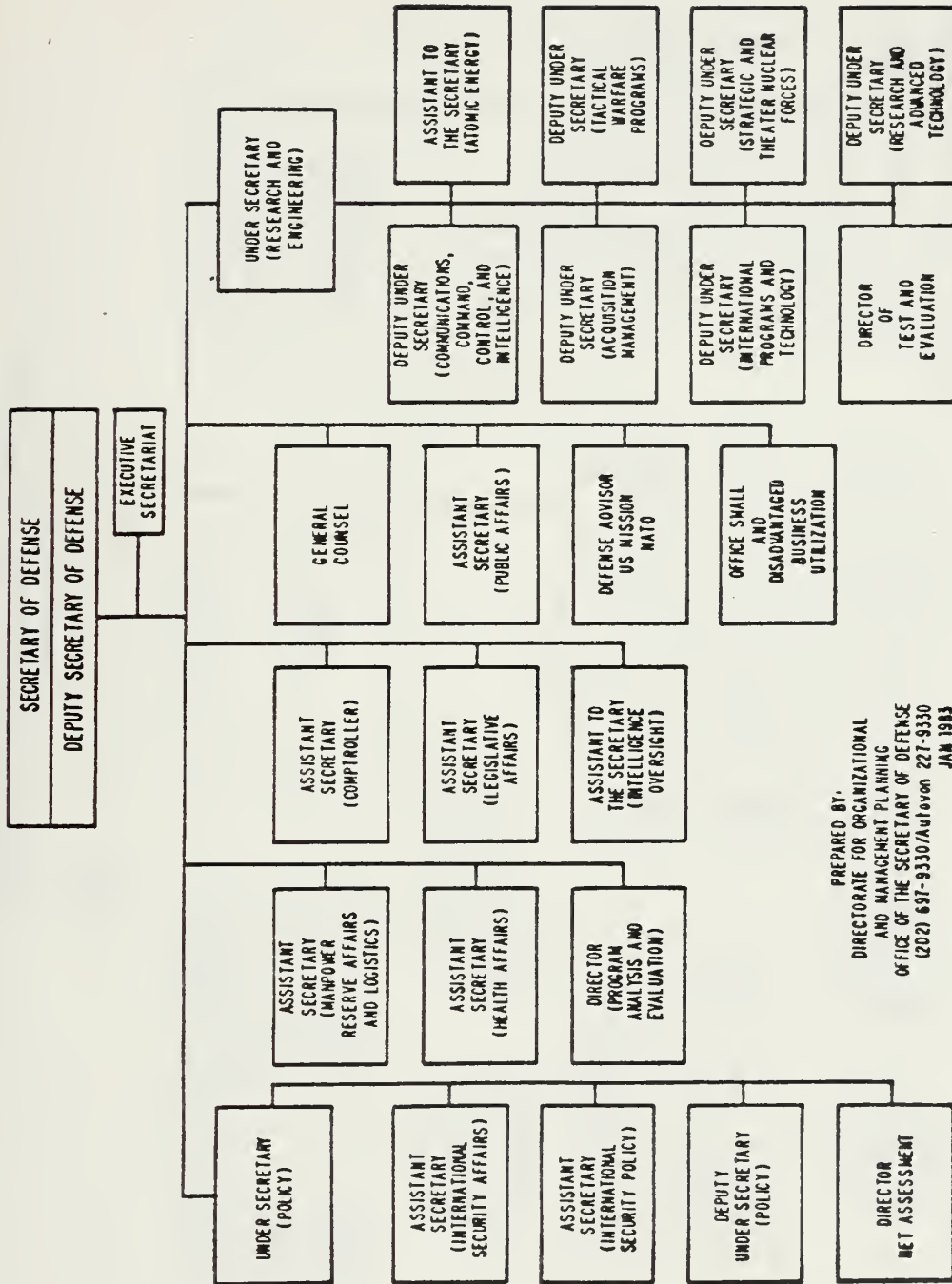
The Armed Forces Policy Council advises the Secretary on matters of broad policy relating to the Armed Forces. The members are: the Secretary of Defense (Chairman); Deputy Secretary of Defense; military departments secretaries; the Under Secretaries; and the Chairman and the Chiefs of the JCS. [Ref. 21]

B. THE OFFICE OF THE SECRETARY OF DEFENSE (OSD)

Various agencies, offices, and positions created by the National Security Act, together with certain other agencies that assist the Secretary of Defense, constitute the primary staff - civilian and military. Seven Assistant Secretaries of Defense are authorized under Title 10 (Armed Forces), United States Code. It states that there shall be Assistant Secretaries of Defense for Health Affairs, Defense Manpower and Reserve Affairs, and Comptroller. The remainder are designated by the Secretary of Defense. There are two Under Secretaries of Defense for Policy and Research and Engineering. [Ref. 22]

The current defense agencies within the OSD which perform common service and supply functions are:

OFFICE OF THE SECRETARY OF DEFENSE



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Figure 1. DoD Organization.

Defense Advanced Research Projects Agency
Defense Nuclear Agency
Defense Mapping Agency
Defense Communications Agency
Defense Supply Agency
Defense Civil Preparedness Agency
Defense Investigative Service
Defense Security Assistance Agency
Defense Contract Audit Agency
Defense Audit Service
National Security Agency
Defense Logistics Agency

C. THE ORGANIZATION OF THE JOINT CHIEFS OF STAFF (JCS)

The Organization of the Joint Chiefs of Staff includes the JCS, the Office of the Chairman, the Joint Staff, and certain supporting agencies, such as the Defense Intelligence Agency, and special offices. The JCS consists of the Chairman; the Chief of Staff, US Army; the Chief of Naval Operations; the Chief of Staff, US Air Force; and the Commandant of the Marine Corps.

The Chairman is appointed by the President, by and with the advice and consent of the Senate, from among the Regular officers of the armed forces to serve at the pleasure of the President for a term of two years and is eligible for one reappointment. In time of war no limitation is placed on the number of reappointments. While holding office he takes precedence over all officers of the armed services, but exercises no military command over the JCS or any of the military Services. [Ref. 23] The Chairman "acts as an advisor, an implementor, and an integrating influence whenever possible." [Ref. 24]

The Service chiefs are appointed by the President, by and with the advice and consent of the Senate, for a period of four years, from the general officers of their respective Services. In time of war, they may be reappointed for another four year term. They serve at the pleasure of the President. [Ref. 25] They have dual responsibilities - a member of the JCS and providing military direction to his service. In performing service duties, the chiefs are subject to the authority of the Service secretaries. However, the secretaries have no control over joint activities. In the JCS the members are under the control of the Secretary of Defense and the President.

The major responsibilities are: (1) principal military advisors to the President, the National Security Council, and the Secretary of Defense; (2) prepare strategic and logistic plans that provide guidance for development of the defense budget, military aid programs, industrial mobilization plans, research and development and contingency plans of combat commands; (3) review plans, programs, and requirements of the separate services and unified commands; (4) assist the President and the Secretary of Defense in the exercise of their command responsibilities. [Ref. 26]

The Joint Staff consists of not more than 400 officers selected by the Joint Chiefs of Staff with the approval of the Chairman. The tenure of the members is subject to the approval of the Chairman, and except in time of war, no such

duty may be more than three years. Officers may not be reassigned to the Joint Staff, except in time of war, until at least three years from the completion of their last tour of duty at the Joint Staff. However, selected officers may be recalled to the Joint Staff in less than three years with the approval of the Secretary of Defense but the number of such officers may not exceed thirty serving at any one time. The Director of the Joint Staff is selected by the Chairman in consultation with the other chiefs and the approval of the Secretary of Defense. The Director must be an officer junior in grade to each member of the JCS. His tenure is that of the Staff but he may never be reassigned to the Joint Staff. [Ref. 27]

The staff performs duties as prescribed by the JCS or the Chairman. The staff is selected in approximately equal numbers from the services. The Joint Staff is forbidden by law to function as a general staff of the armed forces. This means that it shall have no executive powers in its own name; its principal purpose is to prepare plans and reports for consideration by the JCS. [Ref. 28]

D. MILITARY DEPARTMENTS (ARMY, NAVY, AIR FORCE)

The departments consists of the Secretary of the Department and his staff, the Chief of the Service and his staff, the major commands of the Service and agencies. Appendix A contains organizational charts of the military departments, the common functions of the departments, and the primary functions of each department.

E. THE UNIFIED AND SPECIFIED COMMANDS

A unified command, as defined in the JCS Publication 2, is a

"command with a broad continuing mission, under a single commander and composed of significant assigned components of two or more Services, and which is established and so designated by the President, through the Secretary of Defense with the advice and assistance of the Joint Chiefs of Staff, by a commander of an existing unified command established by the President." [Ref. 29]

Currently, there are six unified commands: Atlantic, Southern, Pacific, US European, US Central, and the US Readiness Commands.

A specified command, as defined in JCS Publication 2, is the same as a unified except that it is normally composed of forces from one Service. The three specified commands are the Strategic Air Command (SAC), Military Airlift Command (MAC), and the Aerospace Defense Command (ADCOM). The Air Force provides the forces for these commands.

IV. COMMITTEE REPORTS ON DOD AND THEIR APPLICABILITY TO TODAY

Since the Reorganization Act of 1958, several studies have been accomplished concerning the organization of the Department of Defense. As soon as 1960 with the election of President John Kennedy, a report was released criticizing the organization of DOD. Approximately every eight years a study has been done on the DOD. The reports to be reviewed span an eighteen year period, 1960-1978, and are:

1. The Symington Committee Report which was released by President-elect Kennedy on December 5, 1960. The committee was chaired by Senator Stuart Symington and consisted of members who had been involved in military matters in some capacity, such as Clark Clifford, one of the drafters of the National Security Act.

2. Report to the President and Secretary of Defense on the Department of Defense by the Blue Ribbon Defense Panel commissioned by President Richard Nixon in June 1969. He appointed Gilbert Fitzhugh, chairman of the board and chief executive of the Metropolitan Life Insurance Company, as chairman of the defense panel. It studied, reported, and made recommendations to the Secretary on the following: (1) organization and management of DOD; (2) defense research and development; and (3) defense procurement policies and practices.

3. Suggested Improvements in Staffing and Organization of Top Management Headquarters in the Department of Defense which was prepared by the Comptroller General of the United States on April 20, 1976. Further references to this report will be by the title, General Accounting Office (GAO) Report.

4. Defense Manpower Commission Report which was released in April 1976.

5. Departmental Headquarters Study, A Report to the Secretary of Defense dated 1 June 1978. The study was requested by President Jimmy Carter and the project manager was Paul R. Ignatius, former Secretary of the Navy, Under Secretary and Assistant Secretary of the Army.

6. Report to the Secretary of Defense on the National Military Command Structure. The study was initiated at the same time as the previous study and was chaired by Mr. Richard Steadman, a former Deputy Assistant Secretary of Defense. This study reviewed the National Military Command Structure.

The GAO Report and the Department Headquarters Study found no reasons to reorganize DOD. The GAO Report stated that the problem was the process by which things are accomplished, e.g. the decision making process. It was a systematic flaw. The Department Headquarters Study found that the DOD was well-managed and the problem as in any large organization is to delineate the responsibility in it. Both of these reports stressed that the Service Secretaries should be more fully utilized and are a necessary buffer

between the Services and the DOD. However, the other reports contained findings which indicated that the DOD has many weak points. These are listed in Table I. In a March 1982 article General Jones mentioned many of these problems, such as problems in the JCS structure, interservice rivalry, and staff problems. The problems have persisted through the years, some since the passage of the National Security Act of 1947.

Samuel P. Huntington stated that "interservice rivalry was the child of unification." [Ref. 30] The National Security Act which was to provide a strong unified military establishment actually caused the problem of interservice rivalry. Combining the Services under one defense department caused the Services to compete against each other. A unified defense organization meant competition over organizational and strategic doctrine. A unified appropriations process meant competition for funds.

The Services had different views about unification. The Army supported the idea of unification for three reasons: (1) keeping a substantial ground force; (2) restriction of the size of the Marine Corps; and (3) maximum amount of security for the least cost. The Air Force, of course, supported it because it made them equal partners with the Navy and Army. Also the Air Force thought that they would eventually gain control of all air resources. [Ref. 31]

The Navy opposed unification because it would introduce two extra echelons between them and the President and Congress,

TABLE I
WEAK POINTS IN DOD

WEAK POINTS	SYMINGTON REPORT	BLUE RIBBON REPORT	DEFENSE COMMISSION REPORT	STEADMAN REPORT
Interservice Rivalry	Yes	Yes	No	Yes
JCS	No	Yes	No	Yes
Civilian Control	No	Yes	No	No
Ineffective Unified Structure	No	Yes	No	Yes
Staff Problems				
Duplication	Yes	Yes	Yes	No
Delay	Yes	Yes	No	Yes
Layering	No	Yes	No	Yes
Too large	No	Yes	No	No

possibly even somebody who was hostile to sea power. It also feared that it might divest the Fleet of two of its vital parts: the Fleet Marine Force and land-based aviation. The Navy also feared that, in the name of economy, a single department might "impose a destructive orthodoxy" in the field of research and development. The Navy opposed the single chief of staff concept of the Army in favor of collective decision-making. The Navy feared that the single chief of staff would destroy civilian control. They believed that putting the ultimate authority over the military budget in military hands reduced the Secretary's control and that the Secretary would receive only one viewpoint of the situation. The Navy's view prevailed as to the structure of the JCS; it was legislated as a committee. [Ref. 32]

The Navy has been successful in achieving its goals in spite of unification. It has maintained its organizational integrity. There has never been a serious attempt to take away land-based aviation or to reduce the Marines to a naval police force. The Navy has fared well in the appropriations process and sea power is still appreciated by defense officials and Congress. The Navy's fears about the research and development process were groundless. In two cases where OSD tried to impose an Air Force plane on the Navy, it has been unsuccessful. The occasions were the TFX, a tri-service tactical fighter (F-111) and the "low cost" F-16 fighter. The Navy opted for the F-14 and the F-18, respectively. [Ref. 33]

The Army and Air Force have not obtained all their goals from unification. The Army has maintained a large ground force but have not fared as well as their counterparts in the appropriations process. The Marines were not reduced in size as wished by the Army. The Air Force gained its primary goal, a separate service but not its secondary goal. It does not own all the air resources nor does it have a lock on the strategic mission with the advent of the Polaris for the Navy. The Air Force was forced to procure two Navy-oriented planes, the F-4 and A-7. [Ref. 34]

The Services are rival tribes complete the separate tribal customs, philosophies, professional styles, war colleges, and lifestyles - who really know very little about each other. Each vying for the money to buy the equipment it feels necessary to fulfill its assigned missions. This results in much duplication of effort and money. For instance, both the Army and the Air Force wanted to develop, produce, and operate an intermediate ballistic missile.

The Army felt that a mobile intermediate-range ballistic missile (IRBM) offered great possibilities as a reinforcement to our atomic deterrent forces. It had pushed for the development of the Jupiter IRBM under the leadership of Dr. Wehnher von Braun and his team of German-American scientists, since November 1955. However, the project was setback, when, in November 1956, the Secretary of Defense Wilson gave the operational control of the Jupiter to the Air Force. This

decision virtually amounted to killing the program, because the Army version did not appeal to the Air Force. [Ref. 35]

The Air Force opposed a mobile IRBM and in November 1958, the Air Force directed the Army to remove the mobility feature. A mobile IRBM would require Army-type troops to move, emplace, protect, and fire it. According to General Maxwell Taylor, the Air Force feared that the operational control would revert back to the Army, if the feature remained. He also believed that it was a great asset which could have closed the missile gap, but that the opportunity was lost. The Jupiter was not a stationary target, as was the Air Force developed missile, the THOR. [Ref. 36] Today, the Air Force is planning for an inter-continental ballistic missile (ICBM) that is transported from one launch point to another, the MX missile, a non-stationary target.

The Army and Air Force also had different ideas about the type of aircraft to use for close air support. In 1967 the Air Force was developing a fixed-wing aircraft (A-10) and the Army was developing a helicopter (Cheyenne) to perform the function. Actually there was another aircraft being developed by the Marines, the Harrier. In 1971 a Report on Close Air Support: The A-X, Harrier, and Cheyenne by Senators Charles Mathias and William Proxmire and Representative John Seiberling was released. They said it was ridiculous to have three aircraft which serve the same function. The men recommended that the A-X should be the choice because a fixed-wing system has

so much more loiter time. In 1972 the Cheyenne was killed. However, the Harrier and the A-10 were developed and are in the Air Force's and Marine Corps' inventories. [Ref. 37]

The Services are reluctant to spend money on items for which they have a lack of enthusiasm, such as airlift expenditures by the Air Force and the fast deployment logistics program by the Navy both intended to support the Army. [Ref. 38] Also, the Services have been reluctant to finance command and control systems in order to improve interoperability. Lt General William Hilsman, Director of the Defense Communications Agency (DCA), stated that the obstacle to progress in this area is considerably more political than technical. [Ref. 39]

In the case of Autodin II, a system designed for interactive traffic, i.e. one that will allow subscribers direct access to a computer data base to pull up small amounts of important information (number of combat-ready aircraft at a given base, for instance), DCA is looking for a constituency. The Services are unwilling to give up their own dedicated systems to finance a system that offers a lot of potential merit in interoperability, tighter central control of operating costs. The system would plug into the Services' own computers. The Services have resisted and have spread rumors that Autodin II is in "sad shape, can't deliver"; a common tactic when the Services do not want a system. [Ref. 40]

Dr. William O. Baker, former Bell Laboratories' Board Chairman, says our national security command-communications system is a potential disaster. He says the military is not exploiting the technology available. Also "Disaster" refers as much to the command doctrine of who uses the system when and how. Dr. Baker stated that the Defense Department has never accepted the plan of interchangeability and redundant systems. "Every one, Army, Navy, Air Force wants its own system". He says "commonality is the essence of Command and Control, of the nerve system. Integration and redundancy are essential to effective and efficient military command-control-communications, but we have the problem of getting the Services together; of getting the CO (commander) to appreciate that insisting on his own system may not be the smartest way to go." [Ref. 41]

A system which has run into many of these problems is the Worldwide Military Command and Control Systems (WWMCCS). This system was severely criticized by the Ninety-second Congress in 1971. The House Armed Services Investigating Subcommittee was highly critical of DOD's management and operation of WWMCCS. They stated that the system was slow, unresponsive and that the fragmented and overlapping responsibility had resulted in inefficient and ineffective management. However, the fault was not entirely one of ineffective management but was caused by attempting to force a relationship between separately developed and technically

incompatible system that defied all attempts at integration. [Ref. 42] The Army, Navy, and Air Force, each had their own system.

Part of the problem also is that the JCS is supposed to do strategic planning for the military, to provide the big picture to which systems can be designed. According to a retired Navy Captain, Paul Schratz, the JCS has not been doing this planning, but the Service staffs have. He says that "strategic planning remains a prisoner of parochially oriented, antiquated concepts of land, sea, and air warfare. [Ref. 43] The Services have merrily developed systems according to what they need and not what the Armed Forces need to perform a function. Melvin B. Kline, Professor of the Naval Postgraduate School, stated in a class on project management that the military planners should not ask what plane, or what ship do they need to transport material to a destination but rather what is the best means of transportation? By asking this, the planners have immediately taken it out of the realm of a particular Service.

The various versions of equipment developed by the Services and their separate tribal customs have led to lack of interoperability between them in joint training exercises and in some real world situations; for instance, the seizure of the Mayaguez, a U.S. merchant ship, by Cambodian naval forces on May 12, 1975. The assault force assigned to land on Koh Tang (where it was believed the Mayaguez crew was being held) was

hurriedly assembled. The units were from the Marine Corps and Air Force and employed in a very short timeframe. The units had no opportunity to work together; their command and control relationships and communication networks were unconventional and made combat support and monitorability very cumbersome and difficult. The ground force leader was unable to communicate to the monitoring aircraft that he needed more support due to each having a different type of radio. The pilot could not see the fierce fighting which was taking place on the ground. The assault force also encountered more of the enemy force than was expected. The Pacific Commands' procedures did not assure that subordinate units received all critical intelligence data. The number of casualties was higher than expected due to not having the latest intelligence report and the lack of communications. [Ref. 44]

It is true that for a team to be cohesive and efficient it needs to train together, but command and control relationships and communication networks should not be the problem. However, in this instance the Marines were transported to the beaches of Koh Tang by Air Force helicopters and supported by Air Force tactical fighters instead of their usual cohort, the Navy. The Services should be able to work together in any situation regardless of the combination of forces.

General P. X. Kelly, the former Commander of the Rapid Deployment Joint Task Force (RDJTF), is worried that the RDJTF may be affected by the same type of problems. Almost a decade after Vietnam (from which the military should have learned

some lessons), he admits that the weakest link is interoperability and connectivity in command and control between all of the four Services. The existence of the problem which all too often reflects the personalities and Service prerogatives could undermine the entire RDJTF concept if not resolved quickly. [Ref. 45]

The competition of the Services for the rapid deployment mission has led to cluttered and fragmented command relationships. The responsibility for planning and training of the forces in peacetime has been assigned to the U.S. Readiness Command (REDCOM). The responsibility for the execution of operations is that of the RDJTF. General Kelly will be responsible for the execution of plans, devised largely by others, with forces from all four Services. The forces may not have been trained jointly because REDCOM has no jurisdiction over Navy and Marine Corps, and only limited authority over the Air Force. When deployed on a mission, the RDJTF will come under the jurisdiction of the unified commander which could cause problems. If deployed to the Persian Gulf, the RDJTF could be under the control of either the U.S. European Command or Pacific Command. The chain of command is not clear and distinct in the organization of the RDJTF. [Ref. 46]

An example of a faulty command and control structure was the U.S. Rescue Mission into Iran, April 1980. At the Desert I site, the staging area for the mission, there were no less

than four commanders. The operation was conceived and assembled in components: the rescue force, air group, on-site, and helicopter force. No one at the site had overall operational control. The Commander of the Joint Task Force was not at the site but located aboard a ship in the Persian Gulf. [Ref. 47] The command relationships among those components were not clearly emphasized and were susceptible to misunderstanding under pressure; as was the case when one of the helicopters collided with a C-130. The helicopter pilots questioned the authority of the person giving the orders to evacuate. The lack of effective command and control at Desert I resulted in much confusion. Some of the components had never trained together. There was never a full dress rehearsal. [Ref. 48]

Many of the problems were due to the ad hoc nature of the organization and planning. By not utilizing the existing Joint Task Force organization, JCS had to start literally from the beginning. Planning and training were conducted on a decentralized basis within an informal component command structure that was not clearly established. Because of the concern for operational security (OPSEC), the number of planners was limited so they had to review their own plans. [Ref. 49] As one officer stated, a "classical example of one (a mission) planned and executed by a bureaucracy." [Ref. 50]

The ad hoc nature of the organization and planning has been apparent in many of the incidents involving the United

States. The incidents are: Vietnam, Cuban Missile Crisis (1962), Panama Riots (1964), Tonkin Gulf Crisis (1964), Congo Rescue Mission (1964), Dominican Republic Crisis (1965), Arab-Israeli War (1967, 1973), the Mayaguez Incident (1975), the Korean Tree-Cutting Incident (1976), the Lebanon Evacuation (1977), the Ethiopian Evacuation (1977), and the Iranian Rescue Mission (1980). Each of these the control of the situation was centralized in Washington, in some cases with the President himself. [Ref. 51]

The existing command structure provides little flexibility and considerable potential for confusion in crisis situations as demonstrated in the Mayaguz and Iranian missions. Misunderstandings concerning the forces to be used and to whom they are assigned; command relationships which are ambiguous, and which require extensive coordination between parallel commanders; confusion over the lines dividing areas of responsibility and jurisdictions; and the increased potential for mishaps created by one command to execute the plans prepared by another. The inevitable delays caused by the layering of commands literally invites the National Command Authorities to bypass some element of the command. [Ref. 52]

This occurred in the Mayaguez incident. The officer-in-charge of the Naval Patrol Squadron that provided reconnaissance aircraft for the rescue operation reported that he was being contacted by all levels of command up through the National Military Command Center (NMCC). [Ref. 53] The original idea of the unified command was to decentralize execution of unified

military operations, but actually it has become "the conduit for centralized ad hoc control from Washington." [Ref. 54]

The Blue Ribbon Panel was highly critical of the unified command structure. The Panel felt that the unified commander should be given "unfragmented command authority for their commands" assigned to him. They also found that the unified commanders were limited in their participation in two very important processes, requirements determination and the programming and budgeting process. The requirements flow is from the major component commander to the Service. The unified commanders have no opportunity for review and coordination of the requirements submissions, until after the requirements submissions have been processed and validated by the Services. In the programming and budgeting process the unified commanders would be the most knowledgeable source of advice on the force structures and equipments necessary to perform the mission assigned to his command for execution; but they do not have an effective mechanism for influencing the process. They are asked by the JCS to provide their requirements for the Joint Strategic Objectives Plan (JSOP) but they have no influence over the Services' budgets except through the component commanders. [Ref. 55]

There was a criticism of the organization made by the Steadman Report also. It stated that the unified and specified commanders have no military superior in Washington. The Report indicated that the voice of these commanders should be the Chairman of the JCS. [Ref. 56] The Report

also criticized the current organization of the JCS, as have others including its former Chairman, General Jones.

Throughout the post-World War II years, the Joint Chiefs of Staff has been little understood by the general public and frequently criticized for its performance or lack thereof. General Thomas D. White, former Air Force Chief of Staff, stated that

"This country is not getting the kind of top-level military advice it must have and could have. The talent is available but the organization and functioning of the Joint Chiefs of Staff is faulty. The result is deficient strategic appraisals, divided or compromised views, and even complete absence of important studies. Reflecting the seriousness of this situation, the President and the Secretary of Defense are turning to individuals and agencies other than the JCS for military advice." [Ref. 57]

The primary reason for the problems within the JCS are the dual responsibilities of the members. All members, except the Chairman, wear two hats that of Service chief and that of a JCS member. This structure has tended to nurture interservice rivalries and frustrated the development of integrated military policies. Many decisions concerning numerous military problems have been quid pro quo basis due to overriding service interests. [Ref. 58]

General White cites one example of the conflict of interest:

"Annually each chief of service represents to his department Secretary and to the Secretary of Defense that the budget requirements he submits are the minimum needed by his service to carry out its mission. Within a few days or weeks the Secretary of Defense refers, perhaps in a new format, the budgets of all the armed forces to the Joint Chiefs of Staff for their recommendations.

At this point each service chief, now wearing his Joint Chiefs' hats, must sit in judgment on his own budget in the light of all other service requirements and against a dollar-target ceiling on the total. Since the combined service requirements always exceed the tentative dollar limitation, each chief must either renounce as false or padded his earlier declaration, lose face with his own Service secretary, his staff, and his service as a whole, or disagree with one or more of his opposite numbers on the Joint Chiefs of Staff. It is a grueling situation for the top representatives of the military services and invariably ends in disagreement on a matter of vital importance to the country." [Ref. 59]

Alterations to the structure of the JCS have been made since the passage of the National Security Act of 1947, but none have solved the problems of the original act. They still exist a generation later. The changes of 1949, 1953, and 1967 did not achieve their desired results of strengthening the JCS because none of them altered the power base or constituency of the Service chief. The chief relies upon his Service for support and must be responsive to its needs.

The Services have subverted the intent of many of the basically sound changes. For instance, the Chairman must seek the approval from the Service chiefs prior to appointing the director of the Joint Staff and the directorship is rotated among the Services. The 1958 changes took the Services out of the chain of command for the unified commands. However, the Services have still been able to make some of the commands their "domains"; the Pacific Command, Navy, and the European Command, the Army. Secretary McNamara tried to usurp the Navy's hold on the Pacific Command by appointing another Service officer as commander; he failed.

Also, according to Laurence Korb in his book, Joint Chiefs of Staff, he states that the Services do not send their best personnel to the Joint Staff, nor reward those who have ignored parochial considerations while wearing the "Purple Suit". [Ref. 60] The promotion and career patterns are controlled by the respective Services, and an officer's career prospects can be jeopardized if he stays away too long from his Service. For this reason officers have been reluctant to accept assignments in the Joint Staff or Office of the Secretary of Defense (OSD). [Ref. 61]

General Jones also believes that personnel management is one of the basic causes of the deficiencies within the JCS. He states that there is inadequate cross-Service and Joint experience in the military, from the top down. The officers do not have a deep understanding of their counterparts' strengths and weaknesses, doctrines and traditions. The officers who assume key positions in the joint system (both on the JCS and as combatant commanders) have not had previous experience in the Joint Staff or in the headquarters of a unified command. The problem is compounded by the statutory limitations placed on the tenure of members of the Joint Staff. The officers are leaving in a little more than two years to return to Service positions; as stated before the Services control the promotions. General Jones has stated that "it is hard to argue that Joint Staff duty is a path to the top. With the exception of Army General Earle Wheeler, not a

single Director of the Joint Staff or one of its major components has ever become Chief of his Service or Chairman of the JCS." [Ref. 62]

Service chiefs more often rely upon their Service staffs than the Joint Staff. A custom that has not changed in over twenty years is that each chief prior to attending a JCS meeting is briefed by a senior member of his Services' staff, the operations deputy. The deputy was earlier briefed by working-level staff officers with strongly supported recommendations. The Services have maintained large staffs for policy planning, operations, political-military affairs and the like (see Appendix A); even though the responsibility for incorporating the perspectives of the separate services into the operations of the unified and specified commands should be that of the Joint Staff. [Ref. 63]

The frequent result of "dual-hatting" is split decisions that have to be resolved by the Secretary of Defense at the expense of JCS influence. The civilian leadership in the Pentagon faces a continuous requirement to make decisions, and it needs advice and help in many fields in which joint military professional expertise is required in a timely manner but rarely is.

This is probably a result of another frequent criticism of the JCS system, the Joint Staff. It usually lacks initial guidance from senior levels; has cumbersome staffing procedures, including detailed coordination with the Service staffs that

sometimes stifles initiative and smothers useful dissent in a quest for unanimity. [Ref. 64] Rear Admiral Milton J. Schultz, Jr., Deputy Director for Tactical/Theatre Command, Control, and Communications (C3) Systems in the Office of the Joint Chiefs of Staff, stated in a seminar presented at the Naval Postgraduate School that the Services had to start working as a team, not individual players. The documentation, prepared by his office for the Joint Interoperability of Tactical Command and Control Systems (JINTACCS), had been in the staff coordination loop for six months.

The JCS has no power to force the Services to accept a recommended policy or to procure a joint system. The acceptance of these depends upon the attitudes of the Service chiefs and the Services toward them. A Service chief has considerable latitude in deciding how best to support programs of particular interest to his Service. Outside the JCS arena, he can make his case formally through his Service secretary, or informally through the OSD staffs. The former tactic often has advantage of getting the Service views before the Secretary of Defense in unfiltered form, while the latter provides somewhat greater assurance that when the OSD staffs deliver formal opinions later on, they will be favorable. [Ref. 65]

An example of the lack of power of the JCS in providing a joint system for the Armed Forces is the Joint Tactical Information Distribution System (JTIDS). The system is to interconnect tactical elements of all US and allied services.

JTIDS provides jam-resistant, secure communications between force elements using a high-volume, high-speed digital data link, which allows command and control nets to share more information. Each JTIDS terminal can compute its position relative to other terminals, thus providing location and identification of all participating platforms as well as on-board navigation capability. The Air Force was assigned as the manager of this program.

The JTIDS terminals are to be used by the Air Force, Army, and NATO. The Navy is developing an "enhanced JTIDS architecture", one that is compatible with the Army/Air Force JTIDS version. [Ref. 66] The Navy wanted voice included in the design, so instead of developing one version of JTIDS, we will have two versions with separate development and production costs. The JCS did not have the power to force the Navy to use the original version, but the Navy got the OSD staff to agree to their development of a different version.

The Services' influences on the JCS are undeniable. The intent of the JCS was to provide the President and the Secretary of Defense sound military advice based on "Joint thinking". When military advice appears compromised by Service interest, or suspect in quality, the civilian decision makers turn to other sources. President Kennedy took his strategic advice largely from one man - Secretary McNamara. This was a result of his loss of faith in his military advisors.

From experiences early in his Presidency, he had a "once-burned, twice-shy" attitude toward the CIA and the JCS. The experiences were the Bay of Pigs and Laos. The plan for the invasion of Cuba by refugees was started in the last days of the Eisenhower administration. The planning was done by the CIA and had the stamp of approval by the JCS. At meetings the JCS stated that the chances of military success of the plan were favorable. As the discussions proceeded, the JCS seemed to go contentedly along. After the embarrassing failure of the Bay of Pigs, Kennedy felt he had two soft spots in his administration, the CIA and JCS. He would never be overawed by professional military advice again. [Ref. 67]

As Mr. Schlesinger stated in his book, "The President reserved his innermost thoughts and, in the end blamed only himself. But he was a human being and not totally free of resentment. He would say at times, "My God, the bunch of advisors we inherited... Can you imagine being President and leaving behind someone like all those people there?" My impression is that among his advisors, the JCS had disappointed him most for their cursory review of the military plan." [Ref. 68]

The JCS did not fare any better in the discussions about Laos. The Russians were providing military assistance to the Pathet Lao who were attempting to control Laos. The JCS opposed the sending of limited ground forces to the mainland of Asia. They painted a picture of an all-out Communist response to the forces. Their recommendation was all or

nothing; either go in a large scale of 60000 soldiers, air cover, and even nuclear weapons or stay out. Because of the Bay of Pigs, the JCS declined to guarantee success of the military operations. At meetings the participants had a hard time understanding the Chiefs' proposals. "Indeed, the military was so divided that Vice-President Johnson finally proposed that they put their views in writing in order to clarify their differences. The President received seven different memoranda - 4 Chiefs and 3 Service Secretaries."

[Ref. 69]

The military was unrelenting in their opposition to limited warfare. General Lemnitzer, Chairman of the JCS, outlined the process by which American action would provoke Chinese counteraction, provoking an even more drastic American response. He guaranteed victory only, "if we are given the right to use nuclear weapons." [Ref. 70] The President did not take their advice. He put 10000 Marines on alert in Okinawa, ready to go. The Russians knew about the preparations and they appeared to have an effect. A cease fire was negotiated. [Ref. 71]

The advice provided by the JCS proved to be incorrect in both these instances. The prestige of the JCS was at a very low point. The President turned more and more to generalists in military affairs. The JCS became less and less involved in the area in which they are the experts. The prestige has climbed in past years, but in the view of General Edward C. Meyer, Chief of Staff, U.S. Army, the military still has a

way to go. He says that "The most critical element facing the National Security of the U.S. in the next few years is finding a way to put the military back in its proper role of providing military advice where military advice is most appropriate." [Ref. 72]

The problems in DOD have been discussed in various committee reports and by members of the military and other government organizations. Recommendations have been made for improving our defense department but the major organizational changes have not been implemented. Why? Why has the Joint Chiefs of Staff not been changed? The answer may be that the organizational structure is satisfying the needs of certain people and other organizations.

Congress has sought to perpetuate interservice competition, or, "as it has been put more cynically, a situation in which one Service could be played off against the others." The competition is an important tool in preserving civilian control. [Ref. 73] The legislative liaison staffs of the individual Services vastly outnumber the legislative liaison staff of the Secretary of Defense. Through these strong ties to Congress the Services have been able to stave off any changes to their stature within DOD.

The interests of the military are a matter of self-interest for Congressmen. The late Senator Philp A. Hart of Michigan described the temptation as follows: "... As procurement moved steadily upward, every member of Congress

began to develop constituencies that were in some degree dependent on defense jobs and contracts... It is not politically hard for me to vote against, say, a new aircraft carrier. But if the shipyard was in my state and five thousand people were waiting for the work, I would be examining very closely, and perhaps less critically, all the reasons why the carrier might be essential to national security." [Ref. 74] Perhaps, if the corrections to the problems hurt a Congressmen's constituents, he would argue against the correction, even though it may be valid.

The private corporations have "fanned the flames of interservice rivalry." [Ref. 75] The corporations through advertisement have supported the Service for which they were developing equipment. For instance, in 1959, a conflict between the Army Nike and the Air Force Bomarc was brewing. Boeing took newspaper and magazine ads to counter the misinformation spread about the Bomarc. The Army urged Western Electric to increase its advertising on behalf of the Nike. [Ref. 76] The corporations would not like to see any changes made which reduce their number of customers.

Money and votes are powerful reasons why changes are not made. The Services do not want any changes which might diminish their power or eliminate any of their missions. All three, Congress, the Services, and industry, are closely tied together. A Service needs a new weapon which Industry X says it will build in the congressional district of Congressman A. The Service is receiving a weapon that it

believes is vitally important to fulfill its mission. The Congressman's district will have a new industrial base for taxes and new jobs for his constituents and the industry will make a profit and have made inroads for future contracts with that Service. These interrelationships may be the reason for no major change to DOD.

V. REORGANIZATIONAL PLANS

A. THE COMMITTEE REPORTS' RECOMMENDATIONS

The committee reports recommended varying degrees of reorganization to resolve problems with the defense establishment. The GAO Report and Department Headquarters Study recommended no organizational changes but each stressed that the Service Secretaries should be utilized more fully. The Blue Ribbon Defense Panel proposed the most dramatic changes to the DOD of any of the reports. The highlights of that report shall be presented with the recommendations of the other three committees interspersed. The panel made the following recommendations:

1. The functions of the Department of Defense be divided into three major groupings: (a) military operations, including operational command, intelligence, and communications; (b) management of personnel and materiel resources; (c) evaluation-type functions, including financial controls, testing of weapons, analysis of costs and effectiveness of force structures, etc.
2. Each of these separate groups report to the Secretary of Defense through a separate Deputy Secretary. The staff of OSD should not exceed 2000 people. Currently, there is no statutory limit on the staffs of OSD or the military departments' staffs. There are restrictions on the size of the Joint Staff and the Service Staffs.

3. Figure 2 is the organizational structure recommended by the Blue Ribbon Panel.

4. The responsibilities now delegated to the JCS by the Secretary of Defense to serve as military staff in the chain of operational command with respect to the unified commands should be assigned to a single military officer. This officer should supervise the separate staff support on military operations and the channel of communications from the President and the Secretary to the unified commands. He should report to the Secretary through the Deputy Secretary of Defense (operations). The officer could be the Chairman of the JCS, as an officer, not ex-officio; the Commander of the Tactical Command; or some other military officer. This recommendation is similar to the Army's stand in 1947, a general military staff with a single head.

The Steadman Report did not go quite as far as the panel in its recommendations. The Steadman Report noted that a committee structure is not effective for the exercise of military command and management authority. Such authority could be more effectively exercised by the Chairman. The Report suggested that the Chairman should be formally designated as responsible for providing military advice from a national viewpoint on budget and force structure issues to the Secretary. The Chairman should be designated the spokesman for the combatant commanders. [Ref. 77]

DEPARTMENT OF DEFENSE

PROPOSED BY THE
BLUE RIBBON DEFENSE PANEL
1 JAN 1970

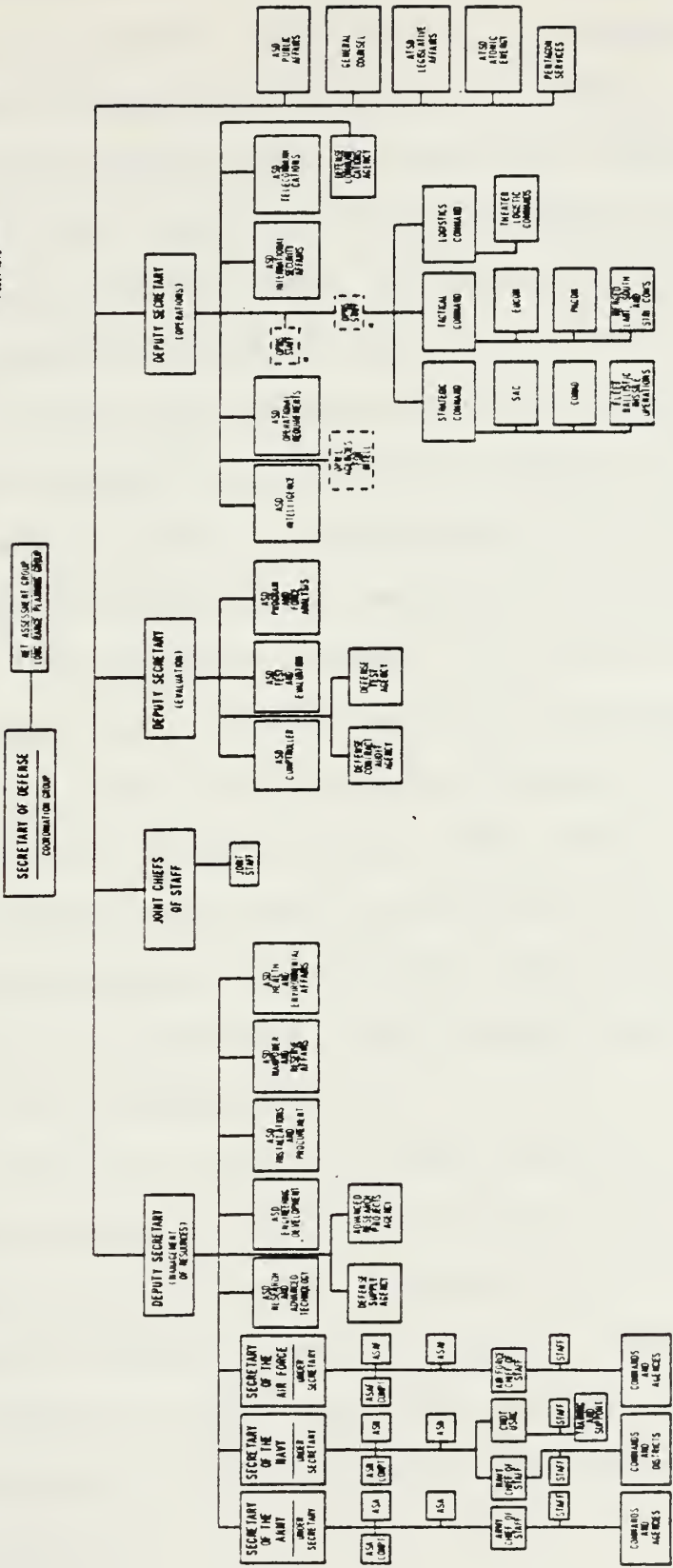


Figure 2. Blue Ribbon Panel.

Recently, General David Jones made the following recommendations to strengthen the role of the Chairman:

- Interservice perspectives should be provided by the Chairman in consultation with the combatant commanders.
- In areas of joint operational and long-range planning, crisis management, and a number of routine matters, neither the Service Chiefs or their staff need to participate at the level of their current involvement.
- The Chairman should be authorized a deputy to provide continuity and to assist in ensuring the readiness, improving the war planning and managing the joint exercising of the combatant forces. The Chairman and Deputy Chairman should come from the two different groupings, one to be from the Navy or Marines and the other from the Air Force or Army. [Ref. 78]

5. The JCS and Joint Staff would be limited to 250 officers. Staff positions in support of activities such as military operations should be eliminated. The Steadman Report went even further in its recommendations.

It would replace the JCS with a body called the National Military Advisors whose job would be similar to the present JCS. The members would be senior officers of the Services but independent of Service responsibilities. The Advisors would be supported by a joint staff that was entirely independent of the Service staffs but would rely on them for specialized expertise.

The Steadman Report also recommended that the requirement for JCS coordination with the Service staffs be reduced by including differing views in the body of staff papers rather than diluting their usefulness by striving for unanimity. The Report suggested that alternative courses of action be analyzed more. [Ref. 79] General Jones also believes that the Service staffs' involvement in the joint process should be limited. He believes that the Service staffs should only advise the Service Chief on a Service matter. He also stated that "the current system in which each Service has almost a de facto veto on every issue at every stage of the routine staffing process" should be abolished. [Ref. 80]

The Steadman Report recommended that only the Services' top officers be assigned to the Joint Staff. General Jones also agrees with this premise. He believes that the officers should have more "truly joint experiences at more points in their careers - and should be rewarded for doing so." The joint educational system should also be expanded and improved. An assignment to the Joint Staff or unified command headquarters should be part of a upward mobility pattern, rather than a diversion or end of a career. [Ref. 81]

6. The unified commanders should be given complete command authority for their commands and the commanders of component commands should be redesignated Deputies to the Commander to make it clear that they are in the chain of command.

7. The existing unified and specified commands should be realigned under three unified commands: Strategic, Tactical, and Logistics Commands.

8. The Secretariats and the Service military staffs should be integrated to the extent necessary to eliminate duplication; the functions related to operations and intelligence should be eliminated; line-type functions- e.g. personnel operations should be transferred to the command organizations. The remaining elements should be reduced by at least thirty percent. The integrated staff should be no larger than 2000 for each military department. Currently, each of the Service staffs is limited to approximately 3000 officers. [Ref. 82]

The Symington Committee and Defense Manpower Commission Reports recommended that the military departments be eliminated entirely. The Commissions' Report did recommend that the Service and Under Secretaries be retained. If this recommendation was implemented, it would eliminate 18 Presidential appointees and the positions of approximately 1000 or more who work directly for them. The Symington Report stated that these positions duplicated many of those in the OSD and in the Service staffs and caused much delay due to the extensive coordination through the three layers - OSD and the two Service layers. The elimination would reduce the number of players in the decision-making process. [Ref. 83] The Panel's Report contained 113 recommendations and of these 92 were implemented in whole or part. The major recommendations of this Report or any of the other reports were not implemented.

A neighboring nation had many of the same problems within its defense establishment. In the late 1960s it made a drastic change in its defense structure to hopefully resolve its major problems.

B. CANADA'S REORGANIZATION

On April 1967, Canada became the first advanced nation to abolish the Army-Navy-Air Force pattern of military organization and replaced it with a single armed service. This organization was a result of two reports, the Glassco Report, the final report (1962) of a Royal Commission on Government Organization, and the 1964 White Paper on Defense - outline of Canada's policies for the next decade.

The Glassco Commission found three central trouble spots. First, Canada was spending too much on administration and too little on procurement of new equipment. Second, both administrative and decision-making processes were not as efficient as they should be; and, finally, was the question of how to maintain strong civilian control of the military establishment.

On the first point, the picture painted by the Glassco Commission was the Canadian military force being buried by its own bureaucracy. Canada had been able to maintain its military budget relatively constant but inflation had diminished its buying power. The success in maintaining a dollar ceiling had been achieved by shifting the balance between hardware and housekeeping sides of the budget. Unable to control the housekeeping (operation and maintenance) costs, the effects of the budget ceiling fell on the controllable items, the hardware.

In seeking to adjust the balance of housekeeping and hardware expenditures, the Commission tried to identify

administrative functions which might be reduced or eliminated. They challenged some aspects of the tri-service pattern of Canada's defense organization. They stated that in many cases the tri-service organization had led to the duplication or 'triplication' of such functions as recruiting, information, pay, and intelligence. The Commission found this to be uneconomical. In the area of research and development they complained "the traditional independence of the three services gives rise to duplication and waste." [Ref. 84]

The administrative structure of the defense organization was one of a network of some 200 tri-service committees charged with coordinating the diverse activities of the department. In these committees the views of the three services were given equal weight, and with no overriding authority vested in any member, each service representative possessed a virtual power of veto. If its members could not agree, the committee could be paralyzed. The Report stated that "In general, the system permits procrastination, and the absence of a single commanding voice may spell the difference between success or failure in any matter of joint concern to the three services." [Ref. 85]

The Chiefs of Staff Committee, comparable to the U.S. Joint Chiefs of Staff, had the same difficulties as the lower committees. The members of the committee were the Service Chiefs, an independent Chairman, and the Chairman of the Defense Research Board. The Chiefs were the centers of power. If the Committee could not reach agreement, the

Chairman could only report it; he could not impose agreement. Each Service Chief had direct access to the Minister of Defense and few failed to use it during controversy. The Report recommended that the Chairman have a stronger role in the affairs of the services. In regard to civilian control, the Commission recommended a staff group outside the armed forces framework to advise the Minister on the improvement of operations and administration. This is a check on the power of the Chiefs of Staff Committee. [Ref. 86]

The Commission recommended that: "(1) provisions be made for the exercise by the Chairman, Chiefs of Staff, of the ministerial power of direction over the armed forces, within such limits as the Minister may define; (2) the Chairman, Chiefs of Staff, be given the 'control and administration' of such elements common to two or more services as the Minister may designate; (3) in recognition of the change of status implicit in these proposals, the title of Chairman, Chiefs of Staff, be altered to 'Chief of Canadian Defense Staffs'." [Ref. 87] The Report did not recommend the creation of a single service.

However, in the debates that followed in the House of Commons, the Liberals thought the Commission was too conservative. They thought the Services retained too much control. The Chief of Defense Staffs might become a 'fourth service' with a new staff competing against the other three. In 1964 the Government released its White Paper on Defense recommending a single service under a single Chief of Defense Staff and a single Defense Staff.

The Minister of National Defense, Mr. Paul Hellyer, totally supported the White Paper and felt that it would correct defects in the current system. The major defects were the structure of the Chiefs of Staff Committee as already noted and the Minister's lack of staffing to coordinate the initiatives coming from the five men on the Committee. The principal sufferer of the lack of coordination and control was the Army who was unable to find and execute a self-contained, independent role. The Army was ill-suited for service except in the international, integrated structure because of the preference of the other services, especially Air Force, for other roles. The Air Force deprived the Army of the support, reconnaissance, and transport it needed to operate as a national contingent. For instance, the Army wanted the short range transport, Caribou, but the Air Force was reluctant to use its funds on that type of aircraft.

[Ref. 88]

Another reason for integration was economical. It was hoped by reducing operation and maintenance costs that more weapons could be procured; to raise the procurement level from 13 to 25 percent of the budget. The Government hoped to save \$100 million annually by eliminating 10000 jobs.

[Ref. 89]

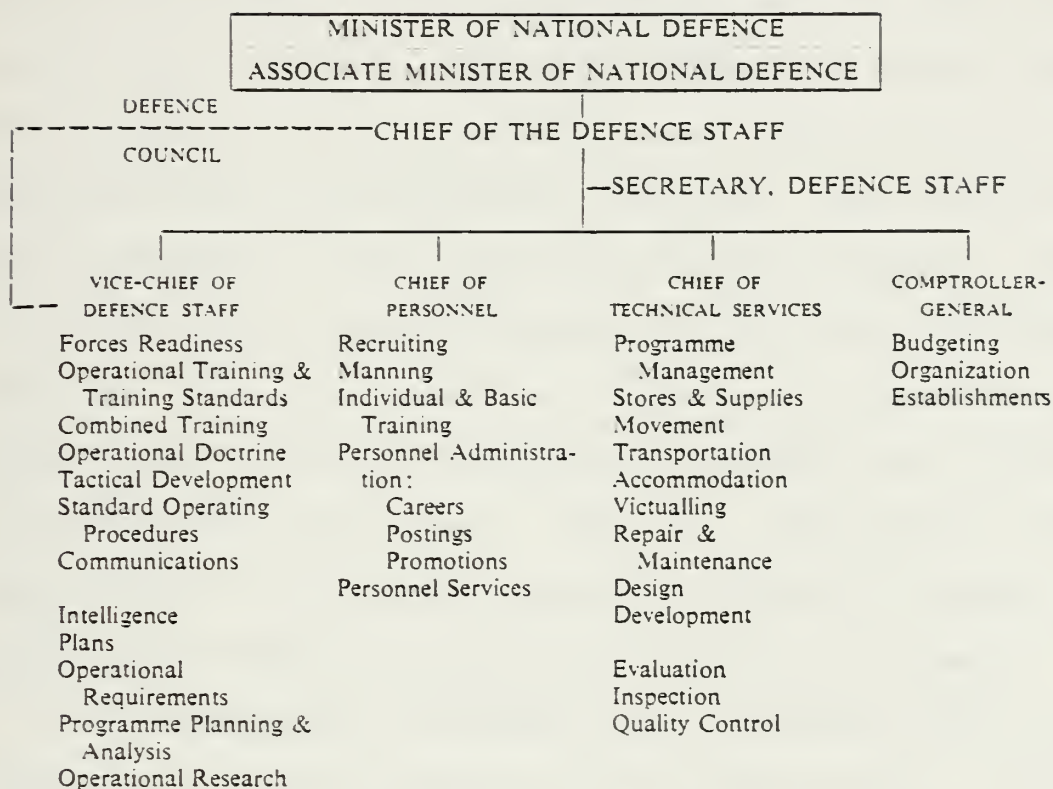
The first stage of the integration was to restructure the upper echelon of the department. On August 1, 1964 legislation was passed which abolished the old position of Chairman,

Chiefs of Staff, and the Chiefs of the individual services. These positions were replaced with the Chief of the Defense Staff, Vice-Chief, and four functional chiefs for Operational Readiness, Personnel, Logistics and Engineering, and Comptroller General. (See Figure 3.) The integration happened with very little outcry from the public. Only negative comments were from retired military officers. This stage of integration was completed on schedule the summer of 1965.

The next stage was the formation of six functional commands; a reduction from eleven organized along service lines. Mr. Hellyer believed that less and less of Canada's military activities would be isolated air, land, or sea but rather a combined operation involving two or more services. The new commands were the Mobile, Air Defense, Maritime, Air Transport, Training, and Materiel Commands. The final stage, complete unification of the services, happened in 1968.

Canada achieved some of its goals with the unification of the services. It reduced the number of headquarters military personnel by nineteen percent and civilian personnel by twenty percent in the initial stages. [Ref. 90] Between 1968 and 1982 manpower fell by thirty percent to its current total of 82,858. In 1981, equipment and research and development was twenty percent of the defense budget, closing the gap between thirteen and-a-half percent in 1967 and its goal of twenty-five percent. [Ref. 91] In the case of administrative efficiency the reorganization is working; but some problems have arisen.

The Integrated Structure of Defence Organization *



*There have been changes since the original proposal of 1964; e.g., functions of the earlier version's Chief of Operational Readiness have been assumed by the Vice-Chief of the Defence Staff.

Figure 3. Canada's Organization.

In the opinion of some of Canada's officers, the National Defense Headquarters has become too large, insensitive, and inflexible. They believe that this has happened for two reasons: lack of confidence of those above in those who occupy positions in the lower echelons and the self-interest of the staff officers. [Ref. 92] They also believe that it has assumed too many responsibilities, such as materiel administration and engineering services. This occurred after the disbandment of the functional Materiel Command. The officers believe these functions are not valid for a headquarters. Its role should be to decide and disseminate policy, and to monitor performance to ensure that the policy is effectively carried out. [Ref. 93] The National Defense Headquarters has become a barrier to effective command and control practices by lengthening the chain of command.

The Headquarters' problems can be resolved with further fine-tuning of the structure of the Armed Forces. A disadvantage of any reorganizational plan is that too much responsibility may be placed at one echelon at the expense of another. A balance must be achieved. The plan must be evaluated thoroughly before implementation and, afterward constantly reevaluated to ensure the plan meets its objectives.

Unification has solved some of the problems reported in the Glassco Report. The single service concept is working for Canada. The concept has a chance in countries having relatively small militaries with limited missions, such as

Canada. At the time of the unification, Canada deemed as its primary missions, peace-keeping or peace-restoring for the United Nations. These missions require a single functional combat command. [Ref. 94] Unification would not be the answer for large armed forces with multifaceted missions, such as the United States.

C. ARE CHANGES NECESSARY TO THE C3 SYSTEM, DOD?

The studies have pointed out weak points in the DOD that have existed since its creation in 1947. Minor changes have been made, but still the problems continue. The Services do not speak as one; the JCS lacks power; and the organizational problems continue. These problems hinder the development of C3 systems within the DOD. Joint C3 systems lack the enthusiastic support of the Services when the "purple programs" compete with organic Service needs. Also, the cost sharing concept cripples a program because it has to be all things to all people. The Services hold the trump card called the budget and use it to negotiate to obtain what it wants. This causes many changes, delays, and cost overruns. [Ref. 95] The JCS is powerless in forcing the Services to support the program.

If the Services do not heed the words of retired Navy Captain Paul Schratz in "militarism or the Military Values", drastic changes to the structure may result. He stated that "in planning for modern war, the military services are not well equipped to do the job which is necessary, because the

kind of planning needed is to rise above militarism, to rise above the roles-and-missions-competition among the services and the engineering approach to strategy." The Services have been rarely able to do this. He further stated that "the loyalty of the US military man is to his service institution, where the technical means become superior to the national goals. His aim should be loyalty to the American people, and the means for carrying out the concept of service to his country should be his military branch of service, not reverse."

[Ref. 96]

All service personnel from the lowest ranking person to the highest should heed these words. At times we lose sight of the 'big picture' and wear 'blinders' seeing only our portion of that picture. And, unless we have the 'big picture', the development of C3 systems is impossible.

Changes have to be made to the Department of Defense to eliminate the weak points. Some changes could be accomplished in the near future; others will require many years to accomplish. Canada demonstrated that major reorganizational changes can be made in an orderly and timely fashion. Canada reorganized their Defense Department in four years. Of course, the DOD is many times larger than Canada's, but with a little American 'know how' and initiative it can be done.

D. THE 1983 REORGANIZATIONAL PLAN

The plan is based upon a phased approach. The first phase is a near term resolution to the problems of the JCS,

the restructuring of the JCS according to General Jones' suggestions. General Jones warned members of the Civilian-Military Institute that the "JCS must reorganize if the United States is to avoid an early disaster at the start of any future conflict." [Ref. 97] The time to reorganize is now. He believes that the reorganization is more important than the budget issue which has obtained most of the attention. Reorganization will determine whether the military will use the money wisely. The military has spent too much time on an "intramural scramble for resources and not enough on ensuring good solid combat capability." [Ref. 98]

General Jones has recommended changes in three specific areas: (1) the role of the Chairman; (2) Service Staff involvement in the joint process; and (3) the training, experience, and rewards for joint duty.

He believes the role of the Chairman should be strengthened as stated previously. These recommendations would require the Congress to alter the National Security Act and the US Code - Title 10. To limit the involvement of the Service staff in the joint process will be the responsibility of the individual Service Chiefs. They will have to change their practices of relying on the Service staffs and receive their advice from the Joint Staff. General Jones believes that the Service Staffs should provide informational input only and not have a "de facto veto" on every issue. This would require agreement among the Chiefs and a new coordination procedures. There is no statute to change; only in-house procedures.

Another changes is to broaden the training, experience, and rewards for joint duty. Officers should have more joint experience in their careers and should be rewarded for doing so. The joint educational system should be expanded and improved. Also an assignment to the Joint Staff or unified command headquarters should be part of an officer's career progression. The parochial attitudes of the Services must change. The Services should promote those officers who perform well in their "purple suits". The removal of the statutory restrictions on the Joint Staff would require legislative action.

The procedural changes could be implemented as soon as the new Chairman, General Vessey, and the Chiefs agreed upon them. The attitude toward joint assignments depends upon the Services and will be demonstrated by the caliber of the officers assigned to the Joint Staff and unified command headquarters and how the officers are rewarded for their work. The changes requiring congressional action will take longer. General Jones believes that these changes are required to insure our national security because it requires the integration of Service efforts more than at any time in our history. If changes are not forthcoming, more drastic alternatives may be selected and Congress may be more receptive because of the debate over the fiscal 1984 defense budget.

General Jones' recommendations will alleviate some of the weaknesses in the JCS and joint operations, but they are

only cursory and more change is required. Maybe his recommendations will be the impetus for further change. They will force Congress to look at the DOD in a different light. It seems that Congress is primarily interested in the cost of new weapon systems, ships, and other hardware; not the structure used to distribute the allocated funds. Perhaps, Congress will realize change is required and amend the National Security Act and associated legislation, according to the plan in Figure 4 . The plan incorporates the recommendations of the various studies and provides for the elimination of many of the weak points listed in Chapter 4, Table I. As General Dickinson said the weak points must be weeded out and the nested C3 systems combined in the most effective way.

The fundamental structure of the reorganization is based on the Blue Ribbon Defense Panel's proposal. The division of the OSD into three major groupings reduces the span of control of the Secretary of Defense. In the current organization, the seven Assistant Secretaries, Secretaries of the military departments, and the JCS are the Secretary's immediate subordinate.

The Deputy Secretary of Defense for Management and Resources should be delegated the responsibility for the following functions: the Services, research and advanced technology, engineering development, installations and procurement, manpower and reserve affairs, health and environment affairs, Defense Supply Agency, and the Advanced Research Projects Agency.

The difference between the plans in this area is the elimination of the military departments. The panel recommended a reduction in the size of the military departments and Service staffs and integration where possible. The military departments duplicate many of the OSD functions and serve no useful purpose. The Service staffs will be reduced in scale and scope as well as the functions of the Services.

Interservice rivalry is never going to be completely eliminated as long as there are separate services and this paper does not advocate a single service. However, it does propose the reduction in the functions of the Services and their roles in the decision-making and budget processes. The Services main functions will be to support and train their men and women. They will be responsible for the recruiting, training, support functions, such as personnel, medical, chaplains, installation and supplies and maintenance of those installations, promotions, and pay.

The Chiefs of the Navy, Air Force, and Army will work for the Deputy Secretary, no intermediate layer. The Marines will remain under the Navy. Each Chief will have a supporting staff and should be limited in size. The organization of the Services will be determined by the Chiefs.

The basic changes are: (1) The Chiefs of staff will no longer be members of a joint decision-making body; (2) The Service will only program that portion of the DOD budget which pertains to personnel and their support and training;

and (3) The intermediate layer, the military departments, is eliminated.

The Deputy Secretary of Defense for Evaluation should be delegated the responsibility for evaluation and control activities, including: Comptroller - including internal audit and inspective services, program and force analysis, test and evaluation, Defense Contract Audit Agency, and a newly created Defense Test Agency. [Ref. 99] The Air Force Test and Evaluation Center (AFTEC) would work with the Test Agency.

The Deputy Secretary of Defense for Operations will be a military officer appointed by the President with the advice and consent of the Senate. Another title for this position could be the Armed Forces Commander. A Vice-Commander will be appointed by the President. The two officers should be selected from the different groupings as suggested by General Jones.

The Deputy Secretary will be delegated the responsibility for the following functions: military operations, the unified commands, operational requirements, intelligence, command, control, and communications, international security affairs, and the Defense Communications Agency. The Deputy Secretary will also have those responsibilities delegated to the JCS. The primary difference is that the troops will be directly under his control.

To assist the Deputy Secretary, a director, either civilian or military, will be appointed to manage the staff. Also a

military director will be appointed to be responsible for the operation of the National Military Command centers (NMCC) and its personnel. The Service command centers will no longer be necessary. The NMCC will be the operations center for the Armed Forces and will continue to perform its present functions. The staff will perform duties as prescribed by the Deputy Secretary. The Joint Staff at the time of the reorganization will become the Armed Forces Staff (AFS). The reorganization of the OSD and AFS should be carefully planned and monitored so the existing staff problems will not be replicated and that the staffs do not become insensitive and inflexible to the commands.

The Deputy Secretary will have command and control of the unified commands. The component commands will have one line of command for administrative and operational functions - unity of command. Each unified command and the components will have well-defined missions to which better C3 systems can be designed. The components will know to whom they report and what information is required. The following commands will be required at least:

1. The Tactical Command (or General-purpose) will be composed of all combatant general-purpose forces of the United States. It would consist of the present six unified commands.
2. The Logistics Command would exercise for all combatant forces the supervision of support activities including supply

distribution, maintenance, traffic management, and transportation. The following would be assigned to this command: the Military Airlift, Military Sea Transportation, and Military Traffic Management Commands, and the theatre traffic management agencies.

3. The Systems Command would combine the research and development and acquisition agencies of the Services. The acquisition of a new system would no longer be assigned to a Service but to this command which will consist of the Air Force Systems, Navy Materiel, and the Army Commands. The Systems Command is placed in the operational chain to keep it close to its customers.

4. The Strategic Command will be composed of the Strategic Air Command, the Joint Strategic Target Planning Staff, and the Fleet Ballistic Missile Operations, the strategic TRIAD.

The unified commands will define the operational requirements used to program and plan their portion of the DOD budget. The lower echelons of the commands at the beginning of the budget cycle will state their needs. At each level of the command similar requirements will be combined and the priority of the requirements will be determined. The unified command will then send the completed operational requirements package to an agency who will place a price tag on the individual items and the total package. Each command's budget will then be in the same format for the AFS and OSD to review and discuss. The Services will submit their requirements in the same manner for support and training.

The role of advising the President will be accomplished by the National Military Advisors. The independent group will consist of active senior officers from the Services, retired military officers, and civilians. The members will be appointed by the President to advise him on all military matters. The tenure of the members will be at the discretion of the President. The President with his advisors will form the national policy.

The basic changes between the plans in this area are:

- (1) Deputy Secretary of Defense for Operations is a military officer;
- (2) JCS is replaced with the National Military Advisors;
- (3) An additional unified command, the Systems Command;
- (4) No Assistant Secretaries rather Deputy Chiefs of Staff; and
- (5) Aerospace Defense Command will not be part of the Strategic Command, but directly under the control of the NMCC.

The plan sets forth the means to eliminate many of the weak points. It is a drastic change to the status quo. It reduces the power of the Services, eliminates decision-making by committee, realigns the lines of command for the forces, reduces many of the staff problems, and establishes an Armed Forces Commander and his general staff. All of these recommendations could make the C3 system more efficient and effective. However, before any major reorganization takes place, many more extensive studies should be accomplished in specific areas, such as budget, arrangement of the staffs, and organization of the Services.

APPENDIX A

MILITARY FUNCTIONS AND ORGANIZATION (Excerpts from JCS Pub 2)

SECTION 1. COMMON FUNCTIONS OF THE MILITARY DEPARTMENTS AND SERVICES

The Military Departments, under their respective Secretaries, shall:

- a. Prepare forces and establish reserves of equipment and supplies for the effective prosecution of war, and plan for the expansion of peacetime components to meet the needs of war.
- b. Maintain in readiness mobile reserve forces, properly organized, trained, and equipped for employment in emergency.
- c. Provide adequate, timely, and reliable departmental intelligence for use within the Department of Defense.
- d. Organize, train, and equip forces for assignment to unified and specified commands.
- e. Prepare and submit to the Secretary of Defense budgets for their respective departments; justify before the Congress budget requests as approved by the Secretary of Defense; and administer the funds made available for maintaining, equipping, and training the forces of their respective departments, including those assigned to unified and specified commands. The budget submissions to the Secretary of Defense by the Military Departments shall be prepared on the basis, among other things, of the advice of commanders of forces assigned to unified and specified commands; such advice, in the case of component commanders of unified commands, will be in agreement with the plans and programs of the respective unified commanders.
- f. Insure that the commander of the unified or specified command concerned is promptly advised, through his component commander or other appropriate channel, of planning for significant changes in logistic support, including base adjustments, which would impact on his plans and programs. Such advice should be provided sufficiently early in the planning process to enable the commander of the unified or specified command to express his views and to have them considered prior to implementation or final decision. This provision is not intended in any way to discontinue or abridge the Service responsibilities and prerogatives contained herein or in other pertinent directives.

g. Conduct research, develop tactics, techniques, and organization, and develop and procure weapons, equipment, and supplies essential to the fulfillment of the functions hereinafter assigned.

h. Develop, garrison, supply, equip, and maintain bases and other installations, including lines of communication, and provide administrative and logistic support for all forces and bases.

i. Provide, as directed, such forces, military missions, and detachments for service in foreign countries as may be required to support the national interests of the United States.

j. Assist in training and equipping the military forces of foreign nations.

k. Provide, as directed, administrative and logistic support to the headquarters of unified and specified commands, to include direct support of the development and acquisition of the command and control systems of such headquarters.

l. Assist each other in the accomplishment of their respective functions, including the provision of personnel, intelligence, training, facilities, equipment, supplies, and services.

The forces developed and trained to perform the primary functions set forth hereinafter shall be employed to support and supplement the other Services in carrying out their primary functions, where and whenever such participation will result in increased effectiveness and will contribute to the accomplishment of the overall military objectives. As for collateral functions, while the assignment of such functions may establish further justification for stated force requirements, such assignment shall not be used as the basis for establishing additional force requirements.

SECTION 2. FUNCTIONS OF THE DEPARTMENT OF THE ARMY

I. Broad Statement of Responsibility and Composition

The department of the Army is responsible for the preparation of land forces necessary for the effective prosecution of war except as otherwise assigned and, in accordance with integrated mobilization plans, for the expansion of the peacetime components of the Army to meet the needs of war.

The Army, within the Department of the Army, includes land combat and service forces and such aviation and water transport as may be organic therein.

II. Primary Functions of the Army

a. To organize, train, and equip Army forces for the conduct of prompt and sustained combat operations on land--specifically, forces to defeat enemy land forces and to seize, occupy, and defend land area.

b. To organize, train, and equip Army air defense units, including the provision of Army forces as required for the defense of the United States against air attack, in accordance with doctrines established by the Joint Chiefs of Staff.

c. To organize and equip, in coordination with the other Services, and to provide Army forces for joint amphibious and airborne operations and to provide for the training of such forces, in accordance with doctrines established by the Joint Chiefs of Staff.

(1) To develop, in coordination with the other Services, doctrines, tactics, techniques, and equipment of interest to the Army for amphibious operations and not provided by Navy and Marine Corps.

(2) To develop, in coordination with the other Services, the doctrines, procedures, and equipment employed by the Army and Marine Corps forces in airborne operations. The Army shall have primary interest in the development of those airborne doctrines, procedures, and equipment which are of common interest to the Army and the Marine Corps.

d. To provide an organization capable of furnishing adequate, timely, and reliable intelligence for the Army.

e. To provide forces for the occupation of territories abroad, to include initial establishment of military government pending transfer of this responsibility to other authority.

f. To formulate doctrines and procedures for the organizing, equipping, training, and employment of forces operating on land, except that the formulation of doctrines and procedures for the organization, equipping, training, and employment of Marine Corps units for amphibious operations shall be a function of the Department of the Navy, coordinating as required.

g. To conduct the following activities:

(1) The administration and operation of the Panama Canal.

(2) The authorized civil works program, including projects for improvement of navigation, flood control, beach erosion control, and other water research developments in the United States, its territories, and its possessions.

(3) Certain other civil activities prescribed by law.

III. Collateral Functions of the Army

To Train forces:

To interdict enemy sea and air power and communications through operations on or from land.

SECTION 3. FUNCTIONS OF THE DEPARTMENT OF THE NAVY

I. Broad Statement of Responsibility and Composition

The Department of the Navy is responsible for the preparation of Navy and Marine Corps forces necessary for the effective prosecution of war except as otherwise assigned and, in accordance with integrated mobilization plans, for the expansion of the peacetime components of the Navy and Marine Corps to meet the needs of war.

Within the Department of the Navy, the Navy includes naval combat and service forces and such aviation as may be organic therein, and the Marine Corps includes not less than three combat divisions and three air wings and such other land combat, aviation, and other services as may be organic therein.

II. Primary Functions of the Navy and Marine Corps

a. To organize, train, and equip Navy and Marine Corps forces for the conduct of prompt and sustained combat operations at sea, including operations of sea-based aircraft and land-based naval air components--specifically, forces to seek out and destroy enemy naval forces and to suppress enemy sea commerce, to gain and maintain general naval supremacy, to control vital sea areas and to protect vital sea lines of communication, to establish and maintain local superiority (including air) in an area of naval operations, to seize and defend advanced naval bases, and to conduct such land and air operations as may be essential to the prosecution of a naval campaign.

b. To maintain the Marine Corps, having the following specific functions:

- (1) To provide Fleet Marine Forces of combined arms, together with supporting air components, for service with the fleet in the seizure or defense of advanced naval bases and for the conduct of such land operations as may be essential to the prosecution of a naval campaign. These functions do not contemplate the creation of a second land army.
- (2) To provide detachments and organizations for service on armed vessels of the Navy and security detachments for the protection of naval property at naval stations and bases.
- (3) To develop, in coordination with other Services, the doctrines, tactics, techniques, and equipment employed by landing forces in amphibious operations.

The Marine Corps shall have primary interest in the development of those landing force doctrines, tactics, techniques, and equipment which are of common interest to the Army and the Marine Corps.

- (4) To train and equip, as required, Marine forces for airborne operations, in coordination with the other Services, and in accordance with doctrines established by the Joint Chiefs of Staff.
- (5) To develop, in coordination of the other Services, doctrines, procedures, and equipment of interest to the Marine Corps for airborne operations and not provided for in subparagraph 20202c(2) above.

c. To organize and equip, in coordination with the other Services, and to provide naval forces, including naval close air support forces, for the conduct of joint amphibious operations, and to be responsible for the amphibious training of all forces assigned to joint amphibious operations in accordance with doctrines established by the Joint Chiefs of Staff.

d. To develop, in coordination with the other Services, the doctrines, procedures, and equipment of naval forces for amphibious operations and the doctrines and procedures for joint amphibious operations.

e. To furnish adequate, timely, and reliable intelligence for the Navy and Marine Corps.

f. To organize, train, and equip naval forces for naval reconnaissance, antisubmarine warfare, protection of shipping, and minelaying, including the air aspects thereof, and controlled minefield operations.

g. To provide air support essential for naval operations.

h. To provide sea-based air defense and sea-based means for coordinating control for defense against air attack, coordinating with the other Services on matters of joint concern.

i. To provide naval (including naval air) forces as required for the defense of the United States against air attack, in accordance with doctrines established by the Joint Chiefs of Staff.

j. To furnish aerial photography, as necessary, for Navy and Marine Corps operations.

III. Collateral Functions of the Navy and Marine Corps

To train forces:

a. To interdict enemy land and air power and communications through operations at sea.

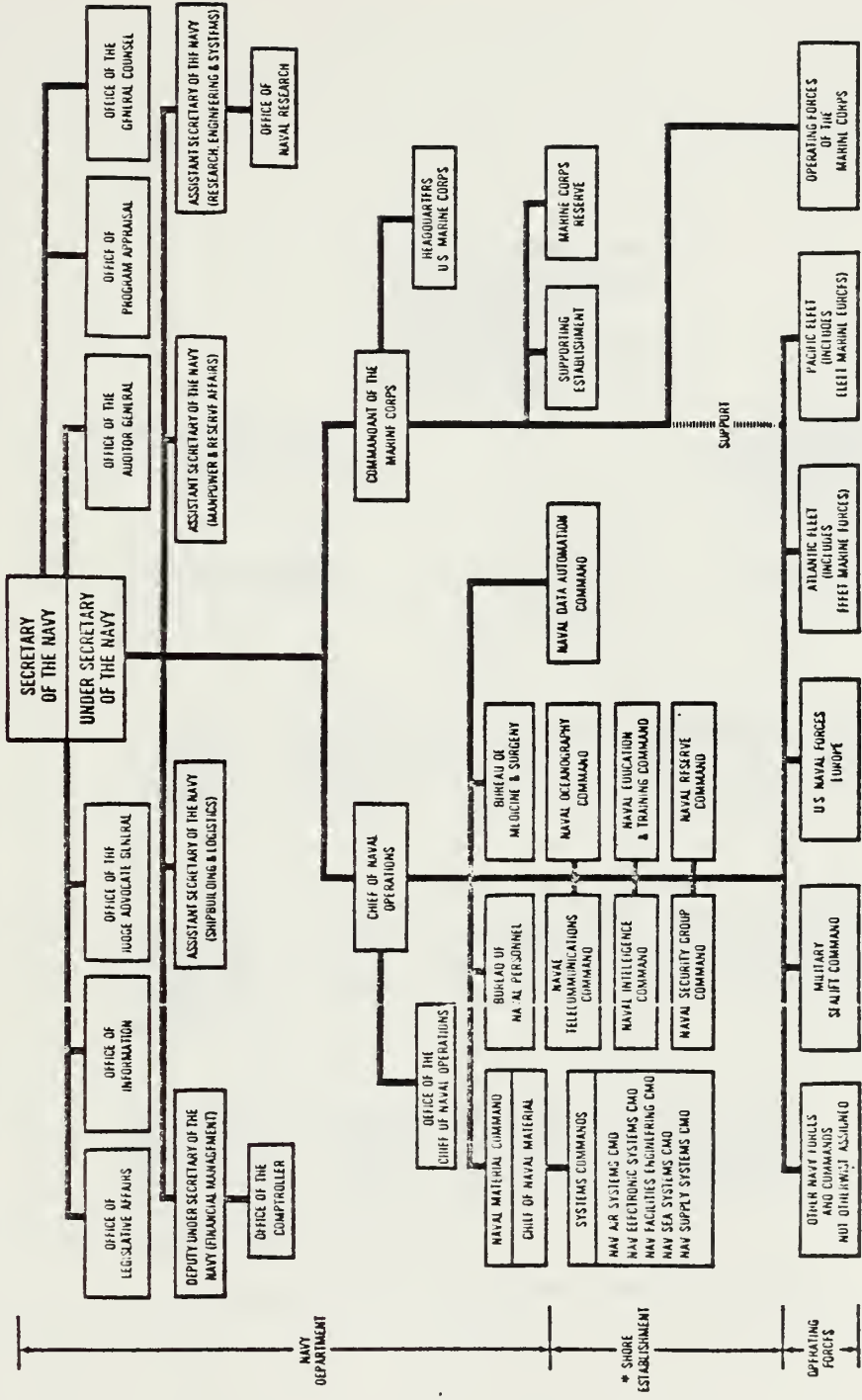
b. To conduct close air and naval support for land operations.

c. To furnish aerial photography for cartographic purposes.

d. To be prepared to participate in the overall air effort, as directed.

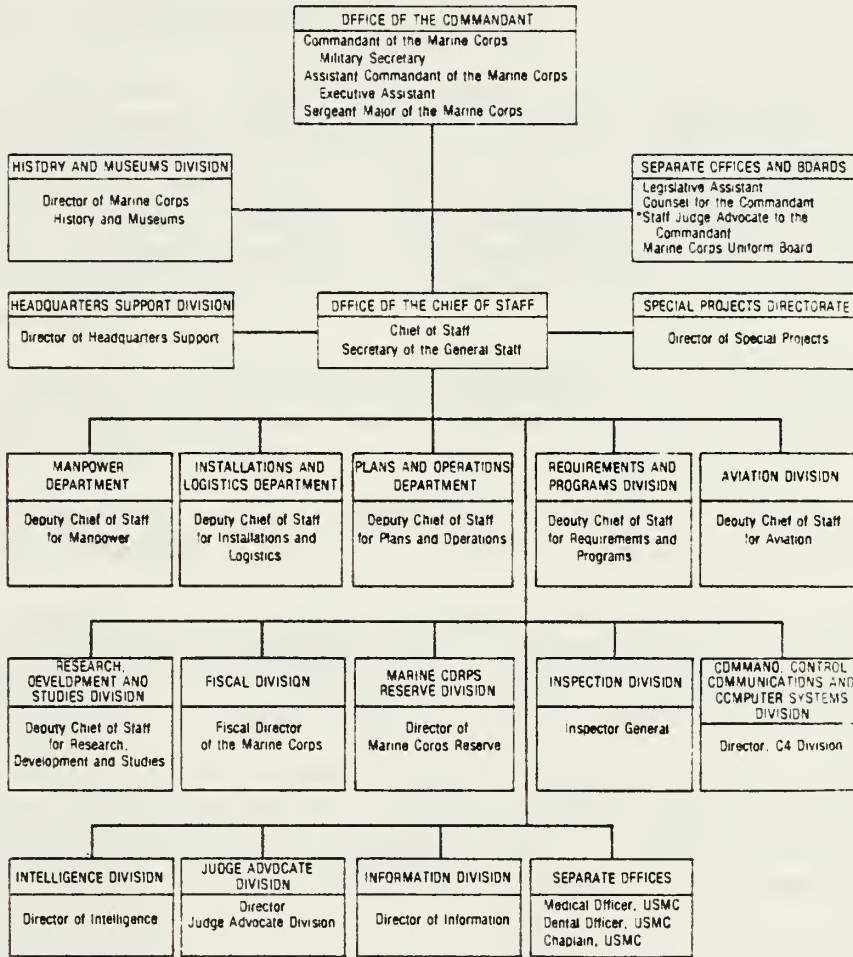
e. To establish military government, as directed, pending transfer of this responsibility to other authority.

ORGANIZATION OF THE DEPARTMENT OF THE NAVY



* Also includes Other Designated Shore Activities. Not Shown On The Chart. Which Are Under The Command Or Supervision Of The Organizations Depicted.

HEADQUARTERS, UNITED STATES MARINE CORPS



*Additional duty for Director Judge Advocate Division

Organization of Marine Corps Headquarters (1977).

SECTION 4. FUNCTIONS OF THE DEPARTMENT OF THE AIR FORCE

I. Broad Statement of Responsibility and Composition

The Department of the Air Force is responsible for the preparation of the air forces necessary for the effective prosecution of war except as otherwise assigned and, in accordance with integrated mobilization plans, for the expansion of the peacetime components of the Air Force to meet the needs of war. The Air Force, within the Department of the Air Force, includes aviation forces, both combat and service, not otherwise assigned.

II. Primary Functions of the Air Force

- a. To organize, train, and equip Air Force forces for the conduct of prompt and sustained combat operations in the air--specifically, forces to defend the United States against air attack in accordance with doctrines established by the Joint Chiefs of Staff, to gain and maintain general air supremacy, to defeat enemy air forces, to control vital air areas, and to establish local air superiority except as otherwise assigned herein.
- b. To develop doctrines and procedures, in coordination with the other Services for the unified defense of the United States against air attack.
- c. To organize, train, and equip Air Force forces for strategic air warfare.
- d. To organize and equip Air Force forces for joint amphibious and airborne operations, in coordination with the other Services, and to provide for their training in accordance with doctrines established by the Joint Chiefs of Staff.
- e. To furnish close combat and logistic air support to the Army, to include airlift, support, and resupply of airborne operations, aerial photography, tactical reconnaissance, and interdiction of enemy land power and communications.
- f. To provide air transport for the Armed Forces, except as otherwise assigned.
- g. To develop, in coordination with the other Services, doctrines, procedures, and equipment for air defense from land areas, including the continental United States.
- h. To formulate doctrines and procedures for the organizing, equipping, training, and employment of Air Force forces.

i. To provide an organization capable of furnishing adequate, timely, and reliable intelligence for the Air Force.

j. To furnish aerial photography for cartographic purposes.

k. To develop, in coordination with the other Services, tactics, techniques, and equipment of interest to the Air Force for amphibious operations and not provided by the Navy and Marine Corps.

l. To develop, in coordination with the other Services, doctrines, procedures, and equipment employed by Air Force forces in airborne operations.

III. Collateral Functions of the Air Force

To train forces:

a. To interdict enemy sea power through air operations.

b. To conduct antisubmarine warfare and to protect shipping.

c. To conduct aerial minelaying operations.

Major USAF Commands

Air Force Systems Command
The Air University
Headquarters Command USAF
Strategic Air Command
Electronic Security Command
U.S. Air Forces Europe
Alaskan Air Command
Air Force Logistic Command
Air Training Command
Military Airlift Command
Tactical Air Command
Air Force Communications Command
Pacific Air Forces
Space Command

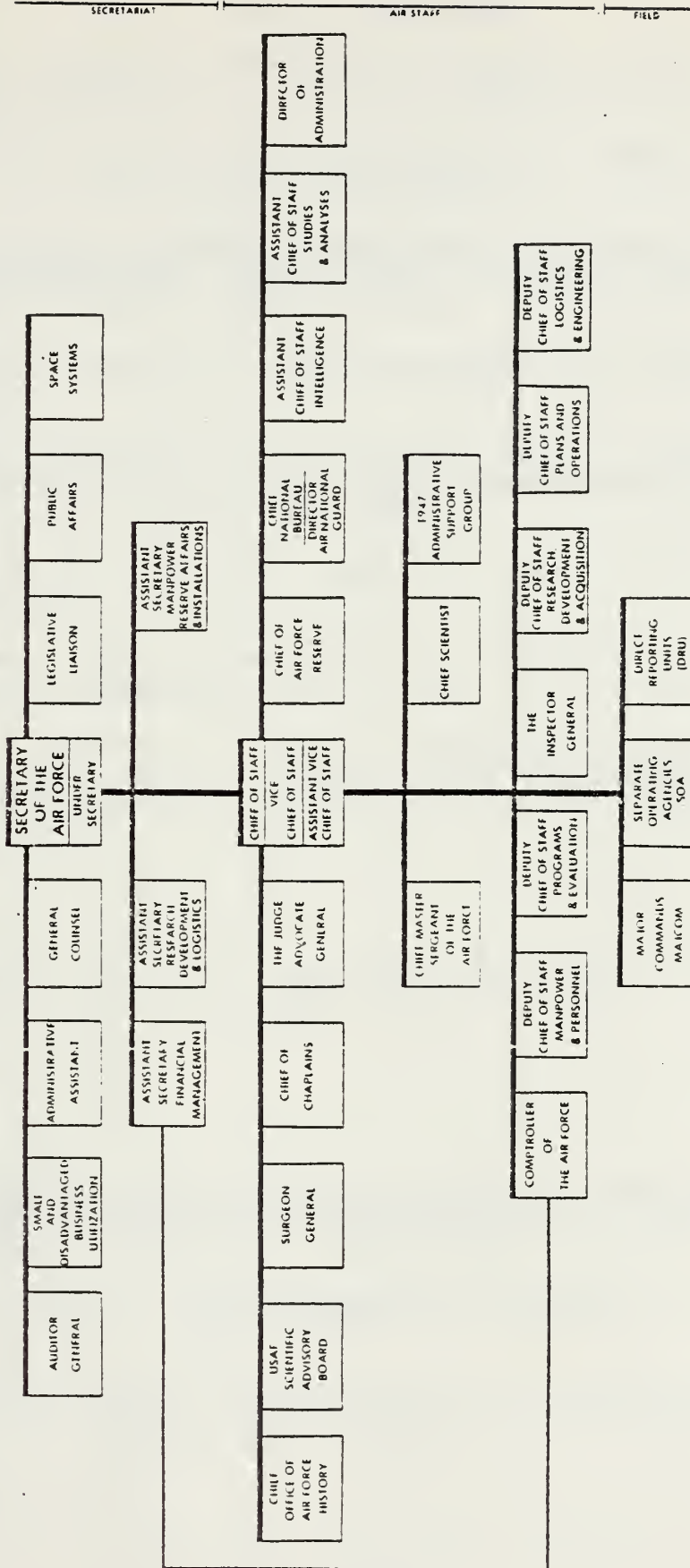
USAF Separate Operating Agencies

Air Force Accounting and Finance Center
Air Force Audit Agency
Air Force Intelligence Service
Air Force Inspection and Safety Center
Air Force Test and Evaluation Center
Air Force Office of Special Investigations
Air Force Service Information and News Center
Air Force Commissary Service
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